DEVELOPMENTS IN MARKETING SPREADS FOR FOOD PRODUCTS IN 1977

Economics, Statistics, and Cooperatives Service
U.S. Department of Agriculture

Agricultural Economic Report No. 398

DEVELOPMENTS IN MARKETING SPREADS FOR FOOD PRODUCTS IN 1977. National Economic Analysis Division, Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture, Agricultural Economic Report No. 398

ABSTRACT

Overall food prices rose 6.3 percent in 1977 over 1976. Grocery store prices climbed 6.0 percent while away-from-home eating prices rose 7.6 percent. Fish and imported foods, particularly coffee, accounted for two-thirds of the 6-percent increase in grocery store prices. Higher processing and distribution costs accounted for most of the other third. The price rise for domestically produced farm foods was much lower. The retail cost of a market basket of farm foods averaged 2.2 percent higher than in 1976. Nearly all of the increase was accounted for by an increase of 3.3 percent in the farm-retail price spread representing charges for processing and distribution. However, the spread rose much less than prices of marketing inputs, such as labor and food containers, probably due to gains in productivity, greater increases in margins on other products to offset rising costs, and a decline in profit rates of food manufacturers. Returns to farmers for food products averaged about 0.4 percent higher than in 1977, mainly due to higher returns for fresh fruits and vegetables. Farmers received an average of 38.8 cents of each dollar spent by consumers for farm foods in 1977--fractionally lower than in 1976, and 3 cents less than in 1975.

KEYWORDS: Price spreads, food marketing costs

Washington, D.C. 20250

March 1978

CONTENTS

SUMMARY

All food prices, including grocery store prices plus away-from-home eating prices, rose 6.3 percent in 1977. Grocery store food prices in 1977 averaged 6 percent higher while away-from-home eating prices registered a slightly higher 7.6 percent increase.

Fish and imports led grocery price increase.

Fish and imported foods, particularly coffee, generated about two-thirds of the 6-percent inflation of grocery food prices, as shown in the accompanying table. Coffee alone accounted for about half the rise in grocery store prices. Most of the remaining increase in grocery store prices in 1977 came from increases in processing and distribution costs of U.S.-produced foods.

Source of Increases in Grocery Store Food Prices

Year	Total grocery food price increase	Contributions from:		
		Farm value	Farm-retail spread	Fish and imported foods
		Percent at retail		
1974	14.9	2.7	9.7	2.5
1975	8.3	1.8	4.6	1.9
1976	2.1	-1.6	2.5	1.2
1977	6.0	0.1	1.8	4.1

U.S.-produced food prices up moderately; marketing spread major factor.

The retail cost of a market basket of U.S. farm foods, which excludes imported foods and seafoods, averaged 2.2 percent higher last year than for 1976, a moderate increase for the second consecutive year. For the third straight year, prices of farm foods rose at a slower rate than the Consumer Price Index of all goods and services, helping to hold down price inflation.

This report focuses on the difference between what farmers receive and consumers pay for U.S.-produced foods. This difference is termed the farm-retail price spread or marketing spread. Nearly all the increase in retail prices of farm foods last year was due to a 3.3-percent increase in the marketing spread, with only a small fraction due to a slight rise in the farm value. The farm value of the market basket of foods averaged 0.4 percent higher than for 1976, mainly because of higher prices for fresh fruits and vegetables and oilseed products. Returns for grain-based foods declined reflecting large grain supplies. Farm values also averaged lower for processed fruits and vegetables and eggs. In 1977, the farm value of food

products accounted for 38.8 percent of the retail cost of these foods, down from 39.4 percent in 1976 and 41.8 percent in 1975.

The 1977 increase in the marketing spread for U.S.-produced food was only about two-thirds as large as the increase in 1976, and was the smallest since 1972. Among major food items, farm-retail price spreads increased most (13 percent) for fresh fruits and vegetables which, unlike spreads for most other foods, tend to widen when the farm value increases as it did in 1977. Farm-retail price spreads widened about 5 percent for bakery and cereal products, dairy products, and processed fruits and vegetables. In contrast, price spreads declined about 5 percent for meat products in 1977, following a substantial increase in 1976 when farm values declined sharply.

Consumers paid more; farmers get same.

Mainly as a result of higher prices, consumer expenditures for food from U.S. farms rose about 5 percent in 1977 to an estimated $180 billion. Farmers received $56 billion of this, about the same as in 1976. The remaining $124 billion paid the food marketing bill, representing total charges for transporting, processing, and distributing farm foods. The bill was $8 billion more than in 1976. Most of its increase was in labor, packaging, and transportation costs.

Marketing input prices rose.

Prices of marketing inputs rose at a slightly faster rate in 1977 than in 1976. Prices of goods and services, such as food containers, fuels and electricity, and motor supplies were up an average of about 7.8 percent. Hourly earnings of food marketing employees advanced about 8.4 percent, about the same rate as in 1976. The marketing spread for farm foods did not rise as much as input prices probably due to gains in productivity, larger increases in margins for other products, and lower profit rates.

Food manufacturing profit rates declined;
food chain profits steady.

Profit rates for food manufacturers, trending up for several years, declined in 1977. For the first 9 months of the year, profits after taxes averaged 3.1 percent of sales and 13.2 percent of stockholders' equity compared with 3.6 percent of sales and 15.2 percent of stockholders' equity in 1976. Profits of large food chains averaged about 0.75 percent of sales and 9.8 percent of stockholders' equity both years.

Market costs varied widely among products.

A study of components of price spreads for major foods showed wide variation among products in costs of marketing functions. In 1977, processing costs ranged from less than 15 percent of the retail price for broilers and milk, 35

to 40 percent for bread and frozen orange juice, to 55 percent of the retail price of canned tomatoes. These differences reflect several factors including the relative size of the farm share which is largest for animal products, how much commodities, such as wheat, are changed after they leave the farm, and the type of packaging required. Retailing costs were found highest for perishable products, averaging about 40 percent of the retail price of fall potatoes and lettuce. This is about double the overall retail store margin, partly because of the relatively large amount of store space they occupy.

DEVELOPMENTS IN MARKETING SPREADS FOR FOOD PRODUCTS IN 1977*

INTRODUCTION

Consumers paid more for food in 1977 even though farmers received about the same amount for the food they produced as they did 3 years ago. This widening gap between what consumers pay and farmers receive is largely due to a persistent rise in food marketing costs.

Congress has directed the U.S. Department of Agriculture to monitor, analyze, and report on the price spread or margin between prices farmers receive and consumers pay for food.

This report presents a number of statistical series and analyses that help explain the behavior of marketing charges and food costs. These include (1) the farm-retail price spread for a market basket of food; (2) cost and profit components of farm retail spreads for selected foods; (3) costs of inputs, profits, and productivity of food marketing firms; and (4) the marketing bill for farm food.

RETAIL FOOD PRICES

Overall food prices in 1977 averaged 6.3 percent higher than in 1976. Grocery store food prices averaged 6 percent higher. But prices for away-from-home eating, which are influenced more by rising consumer demand and by increases in costs of services, rose 7.6 percent in 1977.

After holding about steady through all of 1976, grocery store food prices began to climb early in 1977, largely due to soaring coffee prices and severe winter weather that reduced the Florida vegetable and citrus crops. Through July, food prices had risen at an average rate of a little more than 1 percent a month. Food prices were more stable during the last half of the year, with small declines during late summer nearly offsetting increases in the last 2 months of the year.

The increase in grocery store good prices last year resulted almost entirely from factors other than the farm cost of food. These factors were higher prices for fish and imported foods and costs of marketing foods after they leave the farm. Two-thirds of the 6-percent increase in grocery store food prices resulted from sharp increases in prices of fishery products and

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*This report was prepared by Denis Dunham, National Economic Analysis Division, Economics, Statistics, and Cooperatives Service. Contributions were made by Donald Agnew, George Rogers, Floyd Lasley, William Jones, N.A. Wynn, Floyd Niernberger, and Harry Doty, all of the Commodity Economics Division of ESCS. They supplied price spread analysis for individual commodities.

imported food, especially coffee. Coffee prices, which averaged 77 percent higher in 1977 than in 1976, alone accounted for half of the 6-percent rise. The other third of the increase in grocery store prices last year came almost entirely from increases in farm-retail price spreads, representing charges for processing and distributing food commodities produced on U.S. farms. In this report, we focus on the retail prices and marketing costs associated with these domestically produced foods.

The rise in retail prices of foods originating on U.S. farms was quite moderate again in 1977. The retail cost of a market basket of U.S. farm foods averaged only 2.2 percent higher in 1977 following a 1-percent rise in 1976. The market basket contains 65 items and represents the average quantities of domestically produced foods bought in retail stores during a year by an urban household. It does not include foods consumers buy in restaurants, fishery products, or imported foods such as coffee and bananas (table 1).

Although the average retail cost of domestically produced foods increased moderately in 1977, there was wide variation in price behavior among major food groups. Retail prices averaged sharply higher for fresh fruits (16 percent) and vegetables (12 percent). This resulted from severe winter weather that reduced Florida's fruit and vegetable crops and drove up prices early in the year. Prices of fats and oils also averaged sharply higher (9 percent) in 1977 reflecting tight supplies of oilseeds early in the year and widening marketing spreads later in the year. Small to moderate increases occurred in retail prices of cereal and bakery products and processed fruits and vegetables. These increases were caused by widening marketing spreads.

Retail prices for livestock products showed less variation than crop foods in 1977. Prices of dairy products rose about 3 percent, reflecting a combination of slightly higher farm prices for milk and wider marketing spreads. Poultry prices averaged about 1 percent higher than in 1976 at the retail level. Retail egg prices declined about 3 percent due to a decline of about 7 percent in farm value.

Lower retail prices of red meats offset most of the price increases for other foods in 1977. Reflecting a 6-percent decline in pork prices and slightly lower prices for beef and other red meats, retail prices for all meat products averaged about 2½ percent lower than in 1976. A slight decline in the farm value of meat animals and a 5-percent decline in the farm-retail price spread contributed to lower retail prices.

Domestically produced food prices in 1977 registered a much smaller rate of increase than the 6.5-percent inflation rate for goods and services excluding food. Early in the year, farm food prices advanced more rapidly than other prices in the Consumer Price Index. After mid-year, however, farm food prices provided an element of price stability in the economy.

FARM VALUE

While retail prices of farm foods rose moderately in 1977, average returns to farmers for food commodities were less than 1 percent higher than a year

Table 1--The market basket of farm foods: Indexes of retail cost, farm value, farm-retail spread, and farm value as a percent of the retail cost 1/

Year and quarter	Retail cost 2/	Farm value 3/	Farm-retail spread 4/	Farmer's share
		1967		Percent
1968	103.6	105.3	102.5	39.4
1969	109.1	114.8	105.5	40.8
1970	113.7	114.1	113.4	39.9
1971	115.7	114.4	116.6	38.3
1972	121.3	125.0	119.0	40.0
1973	142.3	167.2	126.5	45.6
1974	161.9	178.3	151.5	42.7
1975	173.6	187.2	165.0	41.8
1976	175.4	178.4	173.5	39.4
1977 5/	179.2	179.1	179.3	38.8
1976:				
I	176.7	183.3	172.6	40.2
II	175.3	182.6	170.8	40.4
III	176.0	178.6	174.4	39.3
IV	173.5	169.1	176.3	37.8
1977: 5/				
I	177.1	177.0	177.1	38.8
II	178.8	179.0	178.7	38.8
III	180.3	180.0	180.5	38.7
IV	180.6	180.3	180.8	38.7

1/ The market basket contains the average quantities of farm foods purchased annually per household, based on consumer expenditures in 1960-61. They are held constant to estimate price changes. Indexes may be converted to dollar totals by multiplying by the following amounts for 1967; retail cost, $1,080.64; farm value, $419.07; and farm-retail spread, $661.57. The dollar amounts represent what the foods in the 1960-61 market basket would cost in a particular year. 2/ Retail cost is any index of retail prices for domestically produced foods published by the Bureau of Labor Statistics. 3/ The farm value is the gross return to farmers for the farm products equivalent to foods in the market basket. 4/ The spread between the retail cost and farm value is an estimate of the gross margin received by marketing firms for assembling, processing, transporting, and distributing the products.
5/ Preliminary.

earlier. Sharply higher prices for fresh vegetables boosted farm value early in the year. Farm value of the market basket continued to increase slightly each quarter of the year, largely as the result of higher returns for meat animals and dairy products. For the year, higher farm values for fresh fruits and vegetables and fats and oils were largely offset by lower farm values for processed fruits and vegetables, bakery and cereal products, and eggs.

The farm value averaged 38.8 cents of each dollar spent in grocery stores for market basket foods in 1977. This share was fractionally lower than in 1976 and the lowest level since 1971. In 1973, the farm share of the food dollar reached 46 cents, the highest level in 20 years. It has declined each year since 1973 as increases in grocery store prices outpaced prices received by farmers for food commodities.

The farm share of the food dollar differs greatly among food products. It is less than 15 percent of the retail cost of the more highly manufactured foods such as corn flakes, canned tomatoes, frozen french fried potatoes, and bread. In contrast, the farm share of the food dollar averages about 55 percent of the retail cost of meat products. In 1977, the farm share declined slightly for most products. The wide variation in the farm share among products is largely due to differences in the amount of resources used in production and the amount of processing and other marketing services performed before products reach consumers.

After rising sharply from 1972 to 1974, farm value of foods has leveled off. Strong foreign demand and reduced output caused crop farm value to almost double from 1972 to 1974, but with expanding production and building stocks, crop farm values have declined from their 1974 peak. Livestock farm value has been more stable in recent years and, in 1977, averaged 8 percent higher than in 1974 (table 2).

While returns to farmers have leveled off, prices paid by farmers have continued to rise the past several years, although the rate of gain has slowed somewhat from the sharp increases in 1973 and 1974. For 1977, farmers paid about 5.7 percent more for production and living items than in 1976 and 24 percent more than in 1974.

FARM-RETAIL PRICE SPREADS

The farm-retail spread is the difference between the retail price and the farm value of a product. It is often called the marketing spread since it represents all the assembling, processing, transporting, and retailing charges that are added to the value of the farm product after it leaves the farm. Marketing spreads consist of the many different costs incurred by marketing firms such as wages of workers, rents, fuels, food containers and supplies, property taxes, and allowances for depreciation of buildings and equipment. The spread also includes any profits earned by food marketing firms.

Widening marketing spreads accounted for nearly all of the moderate increase in the retail cost of the market basket of domestically produced foods in 1977. Price spreads averaged about 3.3 percent higher in 1977 than in 1976.

Table 2--Indexes of farm value of food products versus prices paid by farmers for production and living items

Item	1970	1971	1972	1973	1974	1975	1976	1977
	Percent of 1967							
Farm value of food products:								
Market basket	114	114	125	167	178	187	179	179
Crops	109	116	119	158	218	200	176	180
Livestock	116	114	127	170	165	183	179	179
Prices paid by farmers 1/	112	118	125	144	164	180	192	203

1/ Includes commodities and services, interest, taxes, and wage rates.

This was a slightly smaller rise than the previous year and the smallest increase since 1972. Among major food groups, increases in price spreads were largely confined to crop products. The marketing spread increased 14 percent for fresh fruits and vegetables, 7 percent for processed fruits and vegetables, and 5 percent for bakery and cereal products and dairy products.

Increases in the farm-retail price spread for the market basket occurred quite evenly over the year. This uniform rise reflected a nearly constant underlying rate of inflation in the economy and the absense of widely fluctuating farm value. Relatively stable farm value and prices at the retail level prevented sharp fluctuations in the price spread. The inflation rate was relatively constant at around 6 percent. This kept a constant cost pressure on margins of food marketing firms throughout the year.

The increase in marketing charges in 1977, as measured by the farm-retail price spread, continues a long-term upward trend that parallels the movement in the general price level. Marketing spreads have increased in all but 2 of the past 20 years. For each of the past 3 years, the farm-retail spread has been widening slower than the general inflation rate. In the early 1970's, there was not a very close correspondence between food price spreads and the general inflation rate. This was largely due to the extreme movements in farm values and because of economic controls that prevented firms from covering rising costs. When controls were removed, food price spreads rose at twice the rate of the general price level.

1977 FOOD PRICES IN PERSPECTIVE

Grocery store food prices have increased 56 percent the past 5 years. Most of the increase occurred from 1972 to 1975. Prices have risen much more slowly the past 2 years. Moreover, there are a number of important differences between the earlier increases and those occurring this year (fig. 1).

Higher farm commodity prices accounted for most of the sharp increases in retail food prices in late 1972 and 1973 in response to cyclical adjustments in the domestic livestock industries, worldwide crop shortfalls, an expanding world population, international currency realignments, and easing of world trade restrictions, particularly between the United States and major centrally planned countries. In contrast, sharply widening marketing spreads accounted for most of the food price increases in 1974 and 1975. In that period, food marketing firms passed through cost increases which had been held in check by various phases of the economic controls program through mid-1973. Further sharp cost increases for energy, labor, and most other marketing inputs also contributed to the widening marketing spread. These same cost pressures accounted for most of the food price rise in 1976 which was moderated by lower farm prices for domestic food commodities.

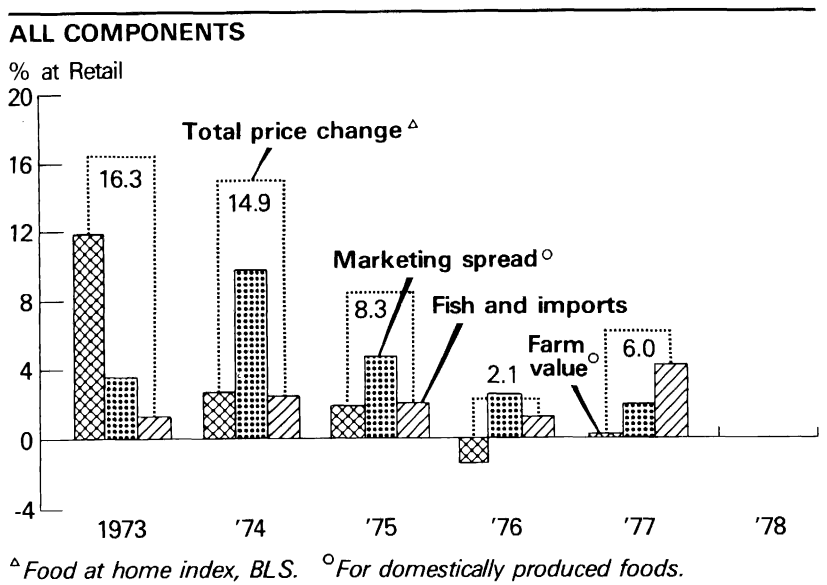
In contrast, sharply higher prices for coffee and other imported foods accounted for about two-thirds of the 6-percent annual rise in grocery prices in 1977. Although returns to U.S. farmers were higher for some food items early in the year due to weather-shortened supplies, farm prices for grain commodities declined again last year and average returns to farmers for U.S. farm foods averaged only a little higher than in 1976. Thus, wider marketing spreads, again largely associated with higher costs for labor and other inputs, accounted for practically all of the moderate rise in retail prices for U.S. farm foods and about 30 percent of the overall rise in grocery store food prices in 1977.

Each of the major components of grocery store food prices--farm value and marketing spreads for domestic farm foods and imported foods and fish--have also shown widely varying movements in their subcomponents. In 1973 and 1975, livestock products provided the dominant influence on the total farm value for the market basket of foods. In 1974, crop products contributed solely to the rise in farm value while livestock product value decreased. In 1976, the farm value for both crop and livestock products decreased and this had a moderating influence on the rise in retail food prices. Farm values for both crop and livestock products were relatively unchanged last year.

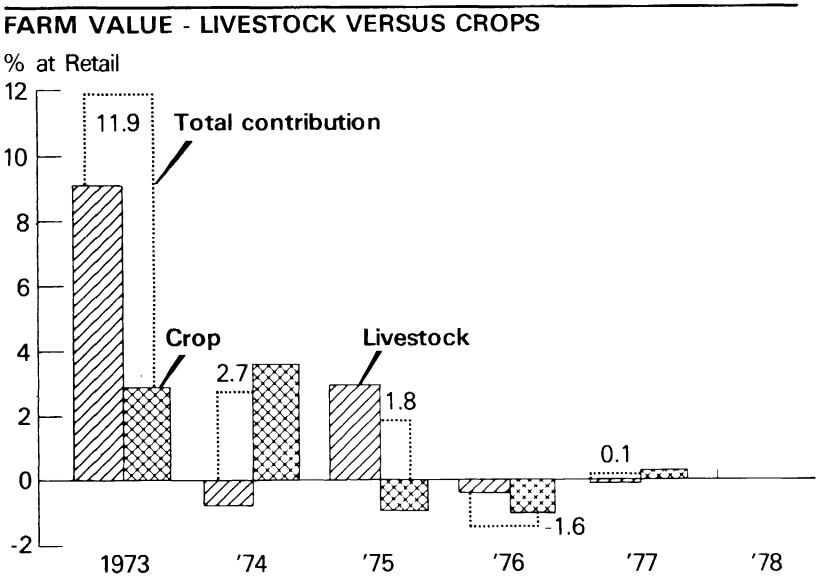
The farm-retail spread for livestock and crop products both shared equally in the rise in food prices in 1973. However, in 3 of the last 4 years, wider marketing spreads for crop products have accounted for much of the total rise in price spreads and have contributed significantly to the rise in food prices.

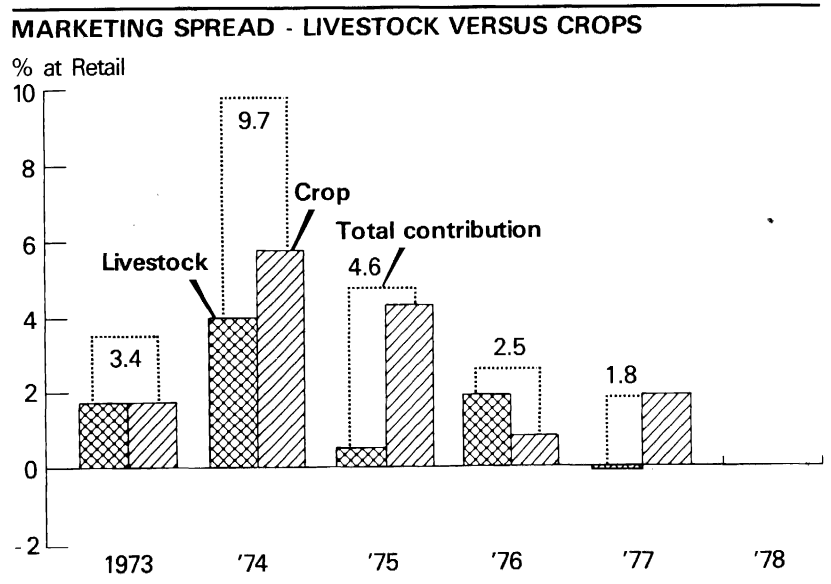
Fish and imported foods, which include coffee, tea, cocoa, bananas, and half of the sugar consumed in this country, make up the difference between domestically produced food price index and all foods used as a basis for the Bureau of Labor Statistics (BLS) food-at-home price index. In most years, the

CONTRIBUTION OF COMPONENTS TO INCREASES IN FOOD PRICES



△ *Food at home index, BLS.* ○ *For domestically produced foods.*





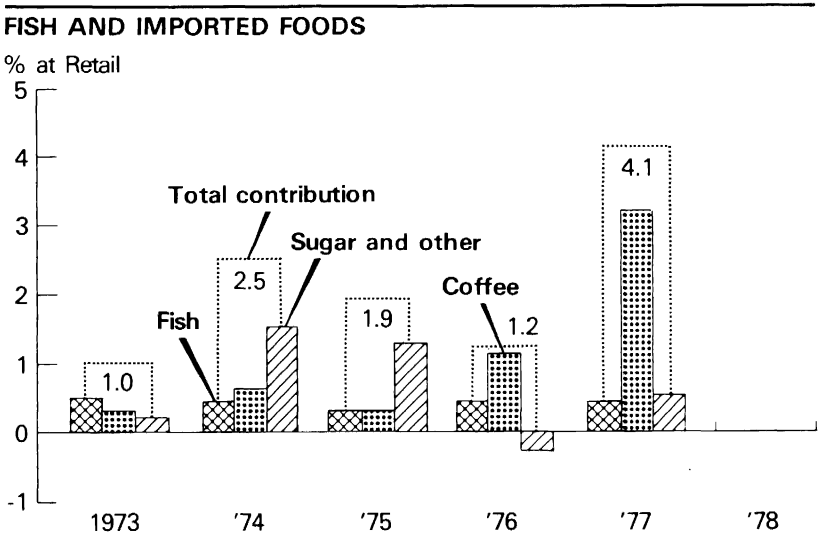


Figure 1

contribution of this group of foods to the total rise in food prices has been relatively slight. However, in recent years these products have contributed much more than their weight of 10 percent in food purchases to food price increases. In 1974 and 1975, a world shortage caused sugar prices to skyrocket. During 1976 and 1977, coffee prices rose to unprecedented levels while tea, cocoa, and fish prices also advanced briskly. Coffee prices alone accounted for about 50 percent of the rise in retail food prices last year with the entire imported foods and fish group contributing about 68 percent of total rise.

THE MARKETING BILL

The marketing bill is an estimate of the total annual charges for transporting, processing, and distributing domestic farm foods. It is the difference between what consumers spend for these foods, including both foods consumed at home and away from home, and the farm value or total payments to farmers for food products (fig. 2). The bill differs from farm-retail price spreads in that it is determined from the total quantities of food marketed in a year, as well as average prices used to derive price spreads. Marketing bill data reveal the magnitude of food expenditures and marketing charges for different commodity groups, at-home versus away-from-home eating, marketing agencies, and individual marketing cost components.

In 1977, estimated expenditures for domestically produced farm foods were $180 billion (table 3). This figure includes food directly purchased by consumers from retail food stores, restaurants, cafeterias, and other public eating places as well as the retail market value of foods served by hospitals, schools, airlines, nursing homes, and other institutions. This figure differs from estimates of personal consumption expenditures for food made by the Department of Commerce, Bureau of Economic Analysis (BEA) and regularly published in the Survey of Current Business and elsewhere. Personal consumption expenditures for food amounted to an estimated $218 billion in 1977. It is larger than farm food expenditures because it includes the value of imported foods, seafoods, food furnished to military personnel, and food consumed on farms where produced which ESCS estimates for farm foods exclude. On the other hand, the BEA estimate excludes foods served in institutions and food purchased as a business expense which are included in ESCS figures.

Expenditures for farm foods rose about 5 percent in 1977, mainly due to higher prices. There was little change in the volume of food purchased. The increase in expenditures represented a continued slackening in the rate of gain the past 4 years as food price inflation lessened. Animal products accounted for slightly over half of farm food expenditures again in 1977. In 1975, the depletion of grain stocks and worldwide increase in grain prices pushed expenditures for crop products above those for animal products.

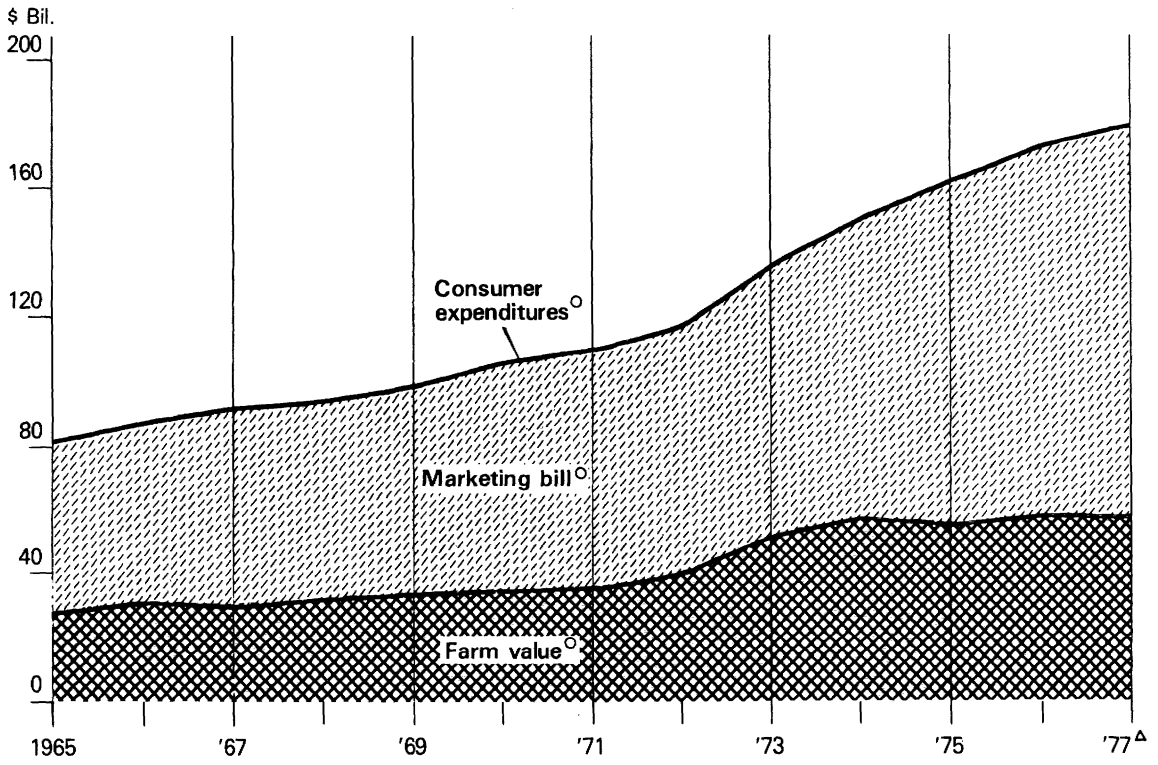
For the fourth consecutive year, farmers received about $56 billion in 1977 for the farm products equivalent to the foods purchased by or for civilian consumers. This figure does not include the imputed values of nonfood byproducts derived from processing farm food products. There was practically no change in the farm value of food products last year since higher farm

Table 3--Consumer expenditures, marketing bill, and farm value for U.S. farm foods

Item and year	Total	At home 1/	Away from home		
			Total	Public eating places 2/	Institutions 3/
			Billion dollars		
Consumer expenditures:					
1967	90.2	65.2	25.0	19.3	5.7
1968	94.0	67.4	26.6	20.5	6.1
1969	97.8	69.3	28.5	21.9	6.6
1970	106.0	74.6	31.4	23.8	7.6
1971	110.8	77.7	33.1	25.0	8.1
1972	117.9	82.9	35.0	26.9	8.1
1973	135.3	97.0	38.3	29.4	8.9
1974	149.2	108.0	41.2	32.3	8.9
1975	161.4	114.5	46.9	36.4	10.5
1976	172.3	120.2	52.1	41.0	11.1
1977 4/	180.0	124.5	55.5	43.7	11.8
Marketing bill:					
1967	61.4	41.5	19.9	15.3	4.6
1968	63.6	42.5	21.1	16.2	4.9
1969	64.1	41.8	22.3	17.0	5.3
1970	71.2	46.2	25.0	18.8	6.2
1971	75.5	48.8	26.7	20.0	6.7
1972	78.5	50.8	27.7	21.1	6.6
1973	84.2	55.1	29.1	22.1	7.0
1974	93.2	62.1	31.1	24.2	6.9
1975	106.5	70.6	35.9	27.7	8.2
1976	116.0	74.2	41.8	32.9	8.9
1977 4/	123.5	78.4	45.1	35.5	9.6
Farm value:					
1967	28.8	23.7	5.1	4.0	1.1
1968	30.4	24.9	5.5	4.3	1.2
1969	33.7	27.5	6.2	4.9	1.3
1970	34.8	28.4	6.4	5.0	1.4
1971	35.3	28.9	6.4	5.0	1.4
1972	39.4	32.1	7.3	5.8	1.5
1973	51.1	41.9	9.2	7.3	1.9
1974	56.0	45.9	10.1	8.1	2.0
1975	54.9	43.9	11.0	8.7	2.3
1976	56.3	46.0	10.3	8.1	2.2
1977 4/	56.5	46.1	10.4	8.2	2.2

1/ Includes food consumed from the home food supply (primarily purchased from retail foodstores). 2/ Includes restaurants, cafeterias, snack bars, and other eating establishments. 3/ Includes the value of food served in hospitals, schools, colleges, rest homes and nursing homes, and other institutions. 4/ Preliminary.

FARM VALUE, MARKETING BILL, AND CONSUMER EXPENDITURES



°For domestically produced farm foods. △Forecast.

Figure 2

values for dairy and fats and oils products and fresh fruits were largely offset by lower farm values for bakery and grain mill products.

The farm value of food products represented 31 percent of the retail value of expenditures for farm foods in 1977. This compares with about 37.5 percent in 1973-74 during the height of commodity price inflation, and an average of about 33 percent in other years since 1970.

Farm share of expenditures is lower than the farm share of the market basket of foods. This is largely because food expenditures include the costs of preparing and serving foods eaten away from home in addition to foods bought in retail stores for use at home. Farm share of foods consumed away from home was about 19 percent of retail value in 1977 compared with 37 percent of the retail value of grocery store food purchases.

The marketing bill for farm foods in 1977 amounted to $124 billion, and was about 7 percent greater than in 1976. Most of the increase was in labor, packaging, and transportation costs (fig. 3). The increase in the bill was the smallest in several years but it accounted for all of the increase in expenditures for farm foods again last year. Since the volume of food marketed changed little in 1977, almost all of the increase in the bill reflected higher costs per unit of output.

Among commodity groups, the marketing bill is largest for fruits and vegetables and meat products, each accounting for about 25 percent of the total bill (fig. 4). Marketing charges were third highest for bakery

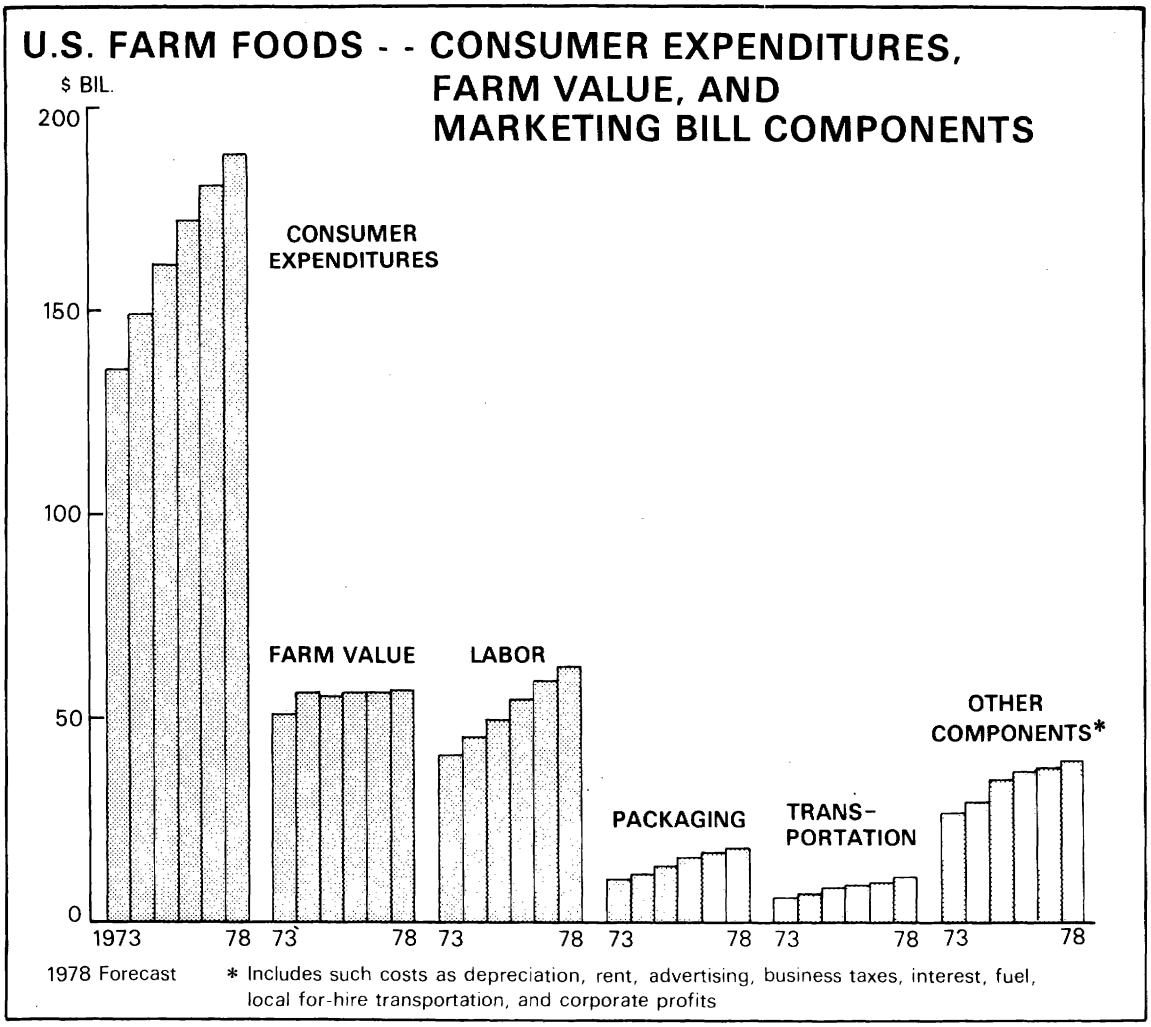
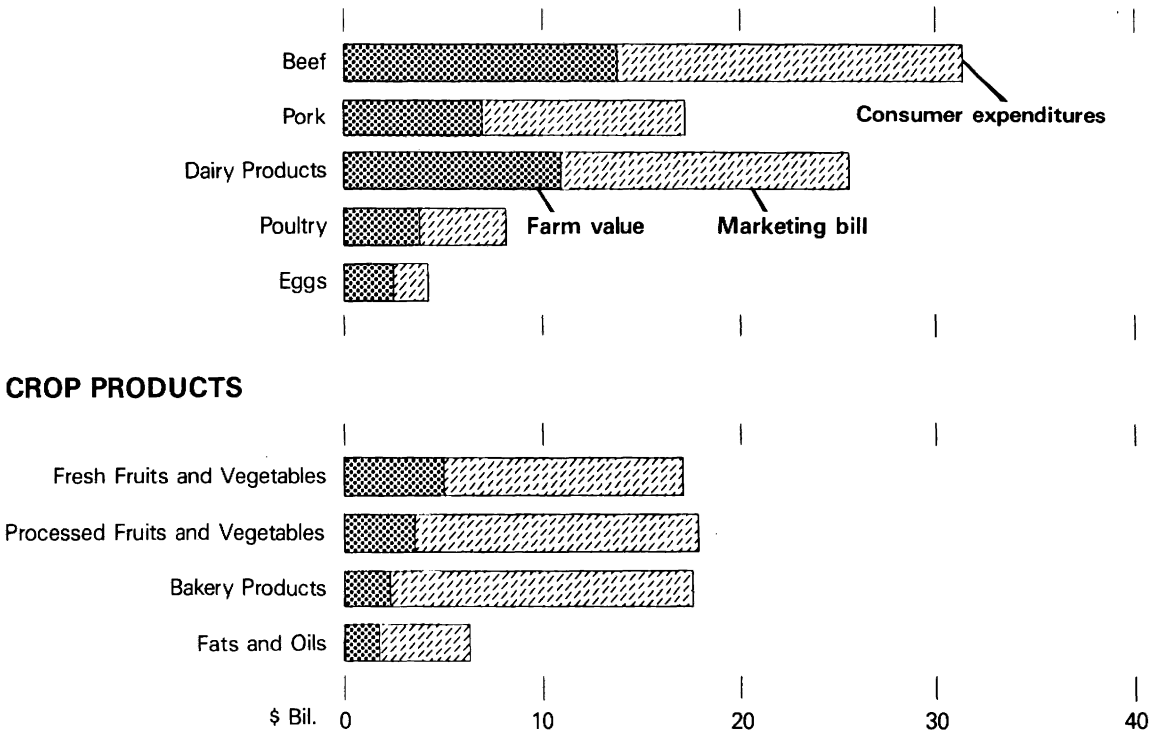


Figure 3

products. Most of the increase in the marketing bill in 1977 occurred in crop products.

The marketing bill is the sum of charges made by various agencies or groups of firms engaged in performing marketing functions. For 1976, the latest available data, processing charges were about 29 percent of the marketing bill; retailing, 26 percent; away from home, 22 percent; wholesaling, 15 percent; and intercity transportation, 8 percent. Processing charges have historically been the largest proportion of the bill but they have grown slower than retailing and other distribution costs the past 10 years. One reason for the slower increase in processing charges is that labor costs accounted for a smaller portion of processing charges than for retailers and eating places. In 1976, labor represented about 40 percent of processing charges, compared with 50 percent of retailing charges, and nearly 60 percent of away-from-home eating marketing charges (table 4).

As a result of the difference in costs of marketing and changing eating habits, the allocation of food spending between food stores and the away-from-home market has been gradually changing. In 1977, the away-from-home market



△ *Data for 1976.*

Figure 4

accounted for about 31 percent of farm food spending. This compares with an average share of about 29 percent from 1970-76 and 26 percent in 1966. Since spending for food away from home primarily represents costs other than the farm value of the food, comparison of the proportion of dollars spent for food consumed at home versus away from home tend to exaggerate the trend in market shares.

The farm value of foods consumed at home versus away from home presents a clearer picture of physical volume of foods going through each market and perhaps the proportion of meals consumed. In 1977, the away from home market accounted for 19 percent of the farm value of foods, nearly the same proportion as the average of the past 10 years. Thus, there appears to have been little difference in the real growth of the two markets. The slight increase in the proportion of expenditures allocated to away-from-home eating mainly reflects greater increases in marketing charges for these foods.

Labor Costs

Direct labor is the largest cost of processing and distributing farm foods. In 1977, labor costs amounted to about $58 billion and comprised 47 percent of the total marketing bill (fig. 5). Direct labor relates only to workers in establishments engaged in marketing farm products. It does not include costs of labor engaged in for hire transportation or in manufacturing and distributing supplies used by marketing firms. Labor costs rose about 7 percent last year, continuing a long-term upward trend. In 1977, labor costs

Table 4--Marketing bill and selected components by marketing agencies

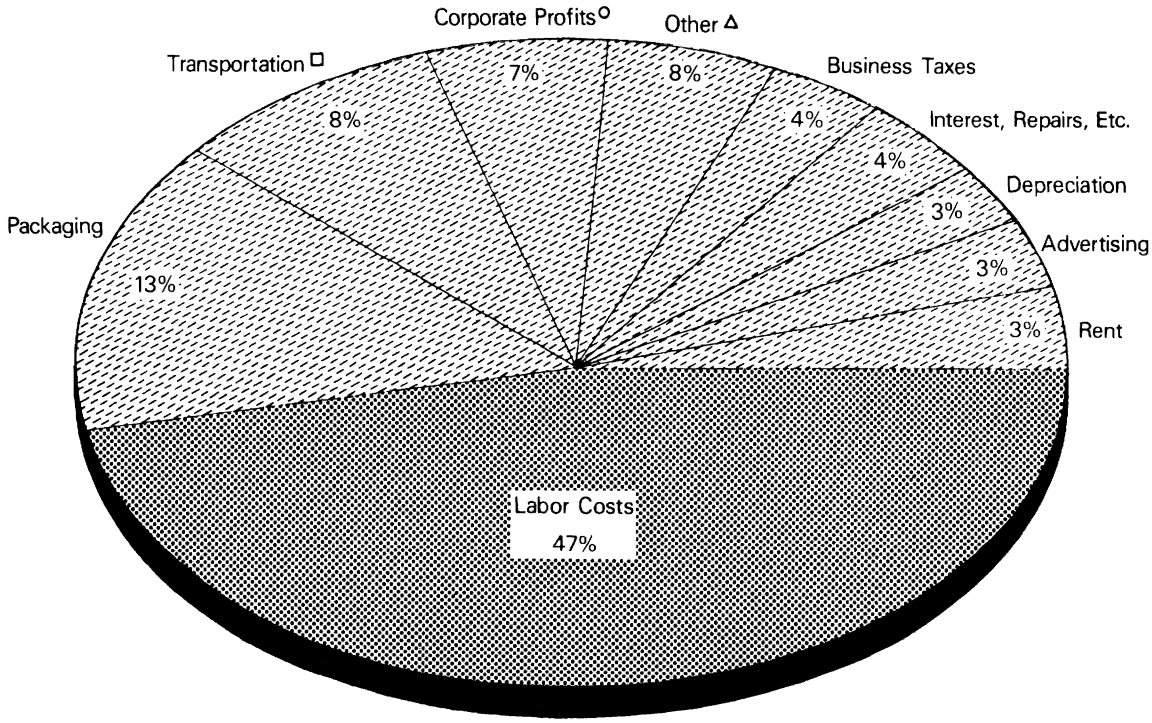
Item	1966	1972	1973	1974	1975	1976 1/
			Million dollars			
Processing:						
Labor	8,327	11,651	11,979	13,012	13,875	15,447
Profits	2,089	1,983	2,618	3,182	3,867	4,122
Other	7,215	10,301	11,536	12,089	13,684	13,627
Total	17,631	23,935	26,133	28,283	31,426	33,226
Wholesaling:						
Labor	3,115	4,991	5,461	6,058	6,676	7,467
Profits	467	985	1,275	1,428	1,950	1,655
Other	3,591	4,428	4,249	5,988	6,913	7,901
Total	7,173	10,404	10,985	13,474	15,539	17,023
Retailing:						
Labor	6,644	10,565	11,503	12,832	14,205	15,991
Profits	551	446	775	853	1,553	1,433
Other	9,458	9,732	10,215	10,965	12,393	13,199
Total	16,653	20,743	22,493	24,650	28,151	30,623
Public eating places:						
Labor	6,550	10,435	11,754	12,918	14,370	15,395
Profits	296	562	689	761	872	1,051
Other	4,663	6,346	6,161	5,942	7,807	9,179
Total	11,509	17,343	18,604	19,621	23,049	25,625
Transportation	4,200	6,100	6,000	7,200	8,300	9,500

1/ Preliminary.

became the largest single component of expenditures for farm foods, accounting for almost a third of the retail value. Labor also exceeded the farm value for the first time.

Increases in the labor component of the marketing bill are closely linked to trends in hourly wages and salaries, other payroll costs such as social security and fringe benefits, employment in the food industry, and productivity. Increases in hourly wages and salaries have averaged about 8 percent for the past couple of years. Costs of fringe benefits such as pension plans and group insurance provided for employees have been the fastest growing labor cost. It is estimated that these costs are nearly 20 percent of wage costs in food processing and around 14 percent in wholesaling and retailing. These proportions last year were about 25 percent higher than 4 years earlier. Also adding to labor costs is a gradual increase in employment in the food industry, primarily in food retailing and away from home eating. In 1976, the farm food marketing system employed 6.15 million workers (full-time equivalent basis); some slight increase likely occurred last year reflecting rising employment in the away from home food industry.

COMPONENTS OF MARKETING BILL*



** Bill for marketing U.S. farm foods in 1976; shares for 1977 will closely approximate 1976 data. ○ Before taxes. □ Intercity rail and truck. △ Residual includes such costs as utilities, fuel, promotion, local for-hire transportation, and insurance.*

Figure 5

Packaging Costs

Food containers and packaging materials comprise the second largest component of the marketing bill. Last year, these costs amounted to about $16 billion, or 13 percent of the bill. Costs were about 6 percent higher than in 1976 reflecting higher wholesale prices for metal cans and other types of packaging. Metal cans account for 20 percent of total food packaging costs. The cost of flexible packaging such as plastic bags and wrapping films have been rapidly increasing, reflecting rising prices and expanding uses of these materials. The increased use stems mainly from the growing market for snack and other convenience foods, and more extensive use in vacuum packing of luncheon meats and related products.

Transportation Costs

The estimated cost of intercity transportation of farm food products by railroad and truck was about $10 billion in 1977, the third largest component of the marketing bill. Air, water, and intracity truck transportation costs are accounted for in the residual component of the marketing bill. Transportation costs were about 5 percent higher in 1977 than a year earlier. This was the smallest increase in several years and reflected a slower rise in freight rates.

Energy Costs

Costs of electricity, natural gas, and other energy sources used in processing and distributing farm foods are estimated to represent only 3 to 4 percent of the marketing bill, but they are one of the more rapidly increasing cost components. About half of the energy costs are incurred in food processing.

Energy costs in food processing rose about 70 percent from 1972 to 1975, compared with only a 50-percent increase in the value of industry shipments and a 23-percent increase in labor costs. The cost of energy used by food retailers, roughly 25 percent of total food marketing energy costs, also have been increasing faster than other costs. In 1976, they averaged about 1 percent of retail food store sales.

Electricity represents a relatively large proportion of total energy costs for most food industries: 75 percent of energy costs for foodstores; 66 percent for away-from-home eating places; 40 percent for food processors; and 33 percent for wholesalers. Electricity rates increased 11 percent from 1976 to 1977, thereby adding to the energy cost of food marketing.

Advertising Costs

Advertising costs of food manufacturers and retailers amounted to between $3 and $4 billion in 1977. This was about 2 cents of the average food dollar, with a portion consisting of promotional coupons which could be used to lower food costs. Half of the food advertising budget is accounted for by food processors and most of the rest by retailers. Advertising costs vary widely amoung industry sectors reflecting such factors as brand differentation and new product introductions. Based on data reported in the October 3, 1977 issue of Advertising Age, a trade magazine, ad costs as a percent of sales for selected industries were: packaged confections, 3.5 percent; canned foods, 2.9 percent; packaged foods, 2.8 percent; dairy products, 1.9 percent; bread, cake, and cookie bakers, 1.6 percent; and meat packers, 0.5 percent.

Capital Costs

Other significant components of the marketing bill are capital costs, which include building and equipment depreciation and rent and interest expense on borrowed funds. These costs totaled between $9 and $10 billion last year, or about 8 percent of the marketing bill. Rising construction costs and interest rates have boosted these costs over the years.

Corporate Profits

Before-tax profits earned by corporate firms from marketing farm food products represent about 7 percent of the marketing bill. Profits in 1976 amounted to $8.2 billion, about the same as 1975. As a result of the slower growth in food expenditures and a decrease in profit margins of food manufactures, corporate profits may have declined slightly last year.

PRICES OF MARKETING INPUTS

The steadily increasing farm-retail marketing spread and marketing bill is directly related to rising costs of inputs used by food marketing firms. Continuing a long-term trend, labor costs rose rapidly in 1977. Average hourly earnings of employees of food stores, wholesalers, and manufacturers rose 8.4 percent in 1977, the same rate as in 1976. Wage increases have been strongly influenced by the desire of workers for protection against price inflation and the loss of purchasing power.

The Department of Labor reported that wage increases negotiated in all major labor contracts declined slightly last year for the second year in a row but labor cost pressures on inflation remain strong. Wage increases negotiated last year averaged 7.9 percent for the first year, compared with 8.4 percent in 1976. Increases over the life of the contracts amounted to 5.8 percent last year compared with 6.4 percent in 1976. When cost-of-living and deferred increases are included, wage increases in 1977 amounted to 7.8 percent, down from 8.1 percent in 1976 and 8.7 percent in 1975(8).

Unit labor costs in food marketing probably rose somewhat less than hourly wages because of rising productivity, but productivity growth likely did not match the pace of 1976. Data for the food industry are not available for 1977, but productivity for the nonfarm business sector of the economy rose at an annual rate of only about 2 percent in 1977 compared with 4 percent in 1976. As a result, unit labor costs increased at an annual rate of over 6 percent, substantially more than the increase in the farm-retail price spread.

Prices for intermediate goods and services, such as food containers, rents, and motor supplies, purchased by food marketing firms rose an average of 7.8 percent in 1977, compared with 7.2 percent in 1976. A combined price index of energy sources including electricity, coal, fuel oil, and gas fuels averaged about 20 percent higher, compared with an increase of about 9 percent in 1976 (table 5). The much larger rise last year was mainly due to an increase of nearly 50 percent in wholesale prices of gas fuels, principally natural and liquid propane gases. Much of the increase in gas prices occurred during the winter months when extremely cold weather caused gas shortages. Natural gas is the dominant energy source for all types of food processing. Processors of beet sugar and canned and frozen fruits and vegetables probably were most affected because the Btu's of energy required per dollar of output is much higher for these products than for most others. Natural gas has been widely used in food processing because of its extremely low cost relative to other fuels on a heat unit basis and because of its clean burning characteristics.

Costs of food containers and packaging materials have followed the inflationary trend in the economy. Wholesale prices of these materials have risen an average of about 6 percent for each of the past 2 years. Prices of almost all packaging materials have been rising, largely reflecting the influence of rising costs of principal raw materials such as tinplate, paperboard, and plastic resins. Price increases have varied among products, particularly over a period of several years. Prices of metal cans, the largest of all food packaging costs, have risen faster than most other packaging products. In 1977, metal can prices rose about 8 percent. Since

Table 5--Indexes of prices of inputs bought by food marketing firms

Year and quarter	Intermediate goods and services 1/				
		Goods			
	Total	Total	Containers and packaging materials	Fuel, power, and light	Services 2/
	1967 = 100				
1970	113	108	108	108	120
1971	120	113	113	120	129
1972	126	118	117	126	138
1973	134	125	123	138	145
1974	159	161	151	202	157
1975	180	186	174	237	172
1976	193	198	184	258	186
1977 3/	208	216	195	310	199
1977:3/					
I	202	209	189	301	193
II	207	215	195	306	197
III	211	219	197	315	201
IV	213	220	199	317	204

	Hourly earnings of employees 4/	Railroad freight rates 5/	New plant and equipment 6/	Interest rates 7/	Bond yields 8/
	Dollars	1969=100	1972=100	Percent	Percent
1970	3.03	109	91	8.48	8.04
1971	3.24	122	96	6.32	7.39
1972	3.45	126	100	5.82	7.21
1973	3.66	129	104	8.30	7.44
1974	3.99	149	115	11.28	8.57
1975	4.40	169	132	8.65	8.83
1976	4.77	185	139	7.52	8.43
1977 3/	5.17	195	146	-	8.02
1977:3/					
I	5.04	195	142	7.48	8.03
II	5.12	194	144	7.37	8.01
III	5.19	194	147	7.87	7.95
IV	5.32	198	150	-	8.10

1/ Represents all goods except raw materials and plant and equipment, and all services except those performed by employees, calculated from wholesale price relatives. 2/ Rent, property insurance and maintenance, and telephone. 3/ Preliminary. 4/ Weighted composite of production employees in food manufacturing and non supervisory employees in wholesale and retail trade, calculated from Department of Labor data. 5/ For food products. 6/ GNP implicit price deflator for investment in nonresidential structures and producer's durable equipment. 7/ Bank rates on short-term business loans. 8/ Aaa corporate bonds; Moody's Investor Service. These yields indicate the cost of current long-term borrowings.

1973, they have risen about 65 percent, or about 1½ times the average of other materials. Paperboard containers and paper products, such as grocery bags have exhibited the smallest price increases, reflecting a slower rise in raw material prices and periodic oversupply that has depressed prices.

Railroad freight rates for food products averaged about 5½ percent higher in 1977 than in 1976, the smallest annual increase since 1973. Railroads were granted a 5-percent rate increase by the Interstate Commerce Commission to take effect November 30, 1977. The rate increase was granted based on industry claims of rising expenses and losses suffered by some lines during last winter and spring. Although data are lacking, freight rates charged by trucks and barges also probably increased last year, reflecting rising labor and fuel costs.

While most costs were rising, costs of borrowed funds were relatively unchanged in 1977. Short-term interest rates averaged slightly higher. But yields on long-term bonds declined about one-half of a percent, reducing the cost of capital financing. While the cost of financing eased, purchase costs for new plant and equipment increased nearly 5 percent in 1977.

FOOD MARKETING PRODUCTIVITY

Productivity relates to the volume of output obtainable from a given input. The most common measure of productivity relates output to labor input, usually expressed as output per hour of persons employed. Other measures such as capital productivity are more difficult to determine and therefore are not as plentiful. The trend in labor productivity is significant in food marketing because of its effect on unit labor costs and prices. When productivity does not go up as much as hourly earnings of workers, unit labor costs and food prices usually rise.

The long-term trend in productivity in the economy and food marketing has been upward (table 6). A recent study of labor productivity in the retail food store industry showed that output per hour of all persons increased at an average annual rate of about 2.4 percent since 1958 (3). 1/ This was nearly the same rate of gain as for the total nonfarm business sector of the economy. Growth in output per hour resulted from a combination of factors including the trend to fewer and larger stores, changes in technology to improve efficiency such as meat wrapping machines and computerized cash registers, and the trend toward prepackaging of produce at the distributor level and centralized cutting and packaging of meat.

Between 1958 and 1972, output per hour increased practically every year. However, in 1973 and 1974, as the economy moved into recession and food prices soared because of tight supplies, output per hour fell in retail food stores. The decrease amounted to 5 percent in 1973 and 2 percent in 1974. The

1/ Underscored numbers in parentheses refer to references listed at the end of the report.

Table 6--Productivity, as measured by output per unit of labor input, in food stores, eating and drinking places, food manufacturing, and the nonfarm business sector

Year	Food stores	Eating and drinking places	Food manufacturing	Nonfarm business sector
		Percent of 1967		
1958	75.4	91.3	-	76.8
1963	89.4	93.8	92.0	89.3
1968	105.1	101.9	103.1	103.2
1969	104.8	100.1	102.1	103.1
1970	110.5	103.5	106.1	103.3
1971	111.9	101.2	109.8	106.3
1972	113.3	104.4	113.5	109.5
1973	107.5	106.0	112.8	111.4
1974	104.6	102.8	113.8	108.1
1975	106.7	105.0	118.4	109.9
1976 1/	106.7	103.2	119.7	114.3
1977 1/	-	-	-	116.7

1/ Preliminary.

decrease in productivity resulted because a decline in output reflecting higher prices did not result in a decrease in hours of labor. Hours worked rose in both years, apparently as the result of the trend toward Sunday store openings, longer hours of operation during the week, and the growth of service-oriented operations, such as bakeries and delicatessens in supermarkets.

As the economy began to improve in 1975, output per hour in the retail food industry registered a gain of 2.7 percent. This resulted from an increase in output and decrease in hours of work. Preliminary estimates of output per hour for 1976, the latest available, show no change over 1975. As a result of the drop in productivity in 1973-74, output per hour in food retailing in 1976 was below the level attained in 1970.

A long-term upward trend in productivity also has prevailed in establishments manufacturing farm foods. Between 1960 and 1976, the estimated annual increase has been around 2.6 percent, slightly higher than for food retailing. Productivity growth slowed in 1973 and 1974, but resumed its upward trend in 1975 and 1976, largely as a result of declining labor use. Among industries manufacturing farm foods, there is a substantial variation in rates of productivity gain, particularly from year to year, as a result of irregular growth in output and adjustment in employment. One of the largest productivity gains over the past 10 years appears to have occurred in the dairy processing industry, probably the result of a shift to large-scale plants and greater automation. Hours of labor used in the industry have declined by more than 25 percent since 1967 as output remained relatively

stable. Output per hour worked also has been above average in the canning and preserving industry.

Labor productivity gains in the food service industry have been much smaller than for food manufacturers and food stores. According to a BLS study, productivity in eating and drinking establishments rose at an average rate of 1.0 percent between 1958 and 1976, but varied widely over the period (4). Since 1968, productivity has risen an average of only 0.4 percent a year. The industry's output, in constant dollars, has expanded at a strong rate but it has been accompanied by a steady growth in the hours of labor employed in the industry, thereby offsetting much of the growth in output. Factors that have contributed to the modest gain in productivity that has occurred in the industry include (1) the spread of modern management techniques and work organization, particularly in the fast food segment of the industry, (2) simplification and standardization of menus, (3) technological innovations such as the microwave ovens that reduce cooking time, and (4) a decline in the number of single unit drinking establishments.

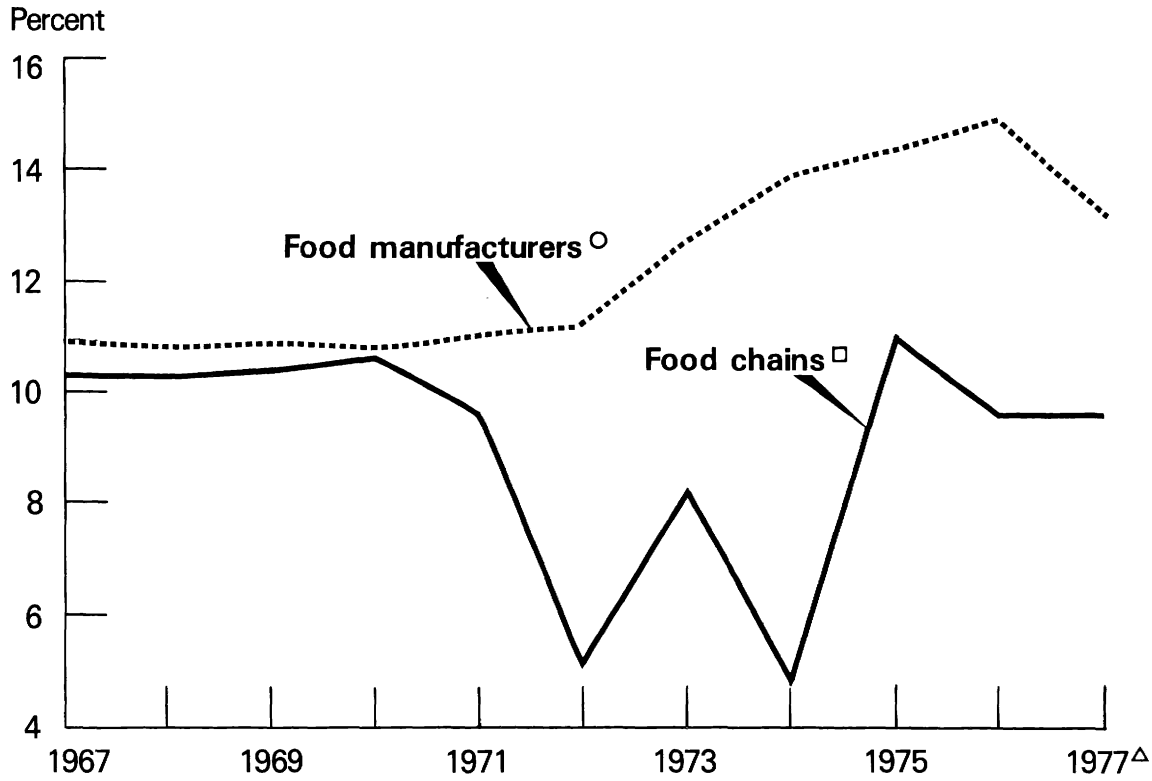
Food industry productivity estimates are not yet available for 1977. But data for the economy show a smaller productivity gain occurred last year than in 1976. Productivity in the total nonfarm business sector rose about 2 percent in 1977 compared with about 5 percent in 1976, which was the largest gain in several years. Owing to the smaller productivity gain, the increase in unit labor costs was nearly two times greater in 1977 than in 1976 (7).

PROFIT RATES

Profit margins of food marketing corporations tend to fluctuate more from year to year than do farm-retail spreads and costs of goods and services bought by marketing firms. In recent years, the earnings performance of food chains also has differed from food processing companies. In addition to this variability, profits are small relative to labor and most other costs and therefore usually account for only a small part of the widening spread between farm and retail food prices. Profit margins of food chains typically average about 1½ cents per dollar of sales. After deduction for income tax, this is equal to less than 1 cent. Profits per dollar of sales of food manufacturers average somewhat higher, mainly because products stay longer in the inventory of processors than in retailer inventories.

From 1974 to 1976, profit margins of the food processing industry showed a definite upward trend (fig. 6). The Federal Trade Commission reports that profits after taxes of food and kindred products industry rose from 2.6 percent of sales in 1973 to 3.4 percent in 1976. Processors appear to have benefitted from declining agricultural commodity prices, rising food consumption, and increased productivity that accompanied the general economic recovery during much of 1975-76. However, not all of the improved profit margins of the industry were related to food operations since many companies in the industry have nonfood operations. In contrast to 1975-76, profit margins in the food and kindred products industry averaged lower in the first 9 months of 1977 than a year earlier (table 7). This decline likely represented an adjustment to an unsustainable high growth rate in sales and

RATE OF PROFIT ON STOCKHOLDERS' EQUITY BY FOOD CHAINS AND MANUFACTURERS



△ *Estimate based on 9-months data.* ○ *FTC data representing all corporations based on a sample of firms.* □ *15 leading firms compiled from "Moody's Industrial Manual."*

Figure 6

productivity that the industry experienced as the economy moved out of recession. According to BLS estimates, productivity growth in nondurable manufacturing, which includes the food manufacturing industry, fell from an annual rate of gain of about 6 percent in 1976 to 3 percent in 1977. This caused a sharp increase in unit labor costs and drop in profit margins.

As a result of expanded profit margins per dollar of sales, there also was an increase in rates of return on invested capital in the food manufacturing industry in 1975-76. For the purpose of evaluating industry performance, return on investment is usually used since it can be more directly compared to other industries or financial investments. Return on stockholders' equity in the food and kindred products industry averaged 14.4 percent in 1975 and 14.9 percent in 1976. These rates were slightly higher than the average return on invested capital in all manufacturing industries but this does not mean that profits in food manufacturing are of unreasonable size. Comparable profit rates make it possible for food firms to acquire and attract capital for maintenance and growth.

In contrast to food manufacturers, profit margins of retail food chains have not established any definite pattern. Profits as a percent of stockholders'

Table 7--Financial data for food manufacturers

Period	Sales	Net profit after taxes	Stockholders' equity	Profit to sales	Profit to equity
		Mil. dollars		Percent	
1974:					
I	36,806	979	31,668	2.7	12.4
II	38,499	1,038	32,461	2.7	12.8
III	40,725	1,313	34,109	3.2	15.4
IV	42,232	1,271	34,504	3.0	14.7
1975:					
I	37,880	920	34,260	2.4	10.7
II	40,281	1,315	35,169	3.3	15.0
III	41,683	1,561	36,336	3.7	17.2
IV	42,247	1,358	37,315	3.2	14.6
1976:					
I	40,576	1,255	37,669	3.1	13.3
II	42,614	1,579	38,623	3.7	16.4
III	43,582	1,678	39,884	3.9	16.8
IV	42,679	1,314	40,250	3.1	13.1
1977:					
I	42,881	1,164	40,992	2.7	11.4
II	45,117	1,573	41,946	3.5	15.0
III	44,333	1,383	42,332	3.1	13.1
IV					

Source: "Quarterly Financial Report," Federal Trade Commission. Data represent national aggregate estimates for corporations based upon a sample of company reports.

Table 8--Financial data for food chains

Period	Sales	Net profit after taxes	Stockholders' equity	Profit to sales	Profit to equity
		Mil. dollars		Percent	
1974:					
III	14,223	129	4,425	0.9	11.7
IV	14,230	139	4,582	1.0	12.1
1975:					
I	14,357	-61	4,427	-.4	-5.5
II	14,523	118	4,494	.8	10.5
III	14,834	113	4,561	.8	9.9
IV	16,149	139	4,825	.9	11.5
1976:					
I	15,995	115	4,910	.7	9.4
II	16,116	138	4,976	.9	11.1
III	16,447	109	4,971	.7	8.8
IV	16,786	135	5,048	.8	10.7
1977:					
I	16,870	136	5,141	.8	10.6
II	17,052	151	5,271	.9	11.5
III	17,296	100	5,331	.6	7.5
IV					

Source: Federal Trade Commission. The data are based on reports from all food retailing corporations having more than $100 million in annual sales, at least 70 percent of which are derived from supermarket operations.

equity in the past 3 years have been considerably above the abnormally low profit levels experienced by the industry during 1972-74. The average profit ratio of 15 leading chains dropped to 5.1 percent of stockholders' equity in 1972, largely because of a profit-lowering price discount program introduced that year by one of the major chains. Profits of large chains recovered somewhat in 1973. In 1974, they recovered even more, except for one major chain which recorded a 35 percent loss on stockholders' euqity due to the establishment of a reserve to cover expenses of a major store closing program they planned for 1975.

In 1975, profits of 15 leading chains averaged 11 percent of stockholders' equity, the highest level in 10 years (fig. 6). Even so, 4 of the 15 leading chains reported a loss for 1975. Profits rates fell again in 1976 to slightly below 10 percent of stockholders' equity, or about 0.7 percent of sales. This annual earnings rate of leading chains was maintained during the first three quarters of 1977. Rates of return vary widely among food chains ranging from negative rates attributable to losses and low positive rates of 0.2 percent of sales to a high of about 1.5 percent. Similarly, returns on stockholders' equity range from negative rates to as high as a positive 20 percent. The wide range reflects numerous factors such as managerial competence, market competition, and operating territories.

Profit rates of all food retailing corporations with annual sales over $100 million are considerably below the average for all retail trade corporations. The FTC reports that after tax profits of food chains averaged about 10 percent of stockholders' equity in 1976 and the first 9 months of 1977 (table 8). In comparison, profits of all retail trade corporations averaged about 15 percent of stockholders' equity, 1½ times greater than food chains.

COMMODITY HIGHLIGHTS

Beef and Pork

Retail prices for Choice beef averaged $1.38 per pound for 1977, about the same as a year earlier. Prices fluctuated within a narrow range during most of the year, but rose in late fall as cattle prices strengthened to a high for the year of $1.45 per pound in December.

Retail pork prices averaged $1.25 per pound in 1977, 9 cents per pound less than in 1976. Retail pork prices averaged $1.20 per pound through May; they then rose seasonally and averaged about $1.30 per pound the remainder of the year. Retail prices reflected larger supplies of pork throughout the year that more than offset moderately lower beef supplies.

Retail beef and pork prices roughly corresponded to movements in livestock prices at the farm level last year. Farm value of beef averaged about 3 percent higher than in 1976, mainly because of rising prices of Choice slaughter cattle in the fourth quarter. Farm value of pork declined about 6 percent, reflecting lower average prices for slaughter barrows and gilts in 1977. The decline in farm value was only about half as large as the 9-cent decline in the average retail price of pork. Unlike other recent years, there

also was a decline in the farm-retail price spread which accounted for about half of the decline in retail prices (table 9).

The farm-retail spread for both Choice beef and pork declined in 1977 following very substantial increases of about 15 percent in price spreads in 1976. The large price spread increases in 1976 occurred as farm value of beef and pork fell sharply. With the decrease in spreads last year, the 2-year increase from 1975 to 1977 was about 8 percent for pork and 10 percent for beef which nearly equals the overall increase in the farm-retail price spread for all foods.

Farm-retail price spreads for beef and pork were far more stable during 1977 than were farm and retail prices because changes in livestock prices roughly corresponded to retail meat prices. For example, monthly price spreads for beef ranged between a high of 62 cents and a low of 55 cents. In comparison, monthly retail beef prices and farm value varied by about 12 cents between the high and low.

The farm share of the retail price of meats increased in 1977. The farm share for Choice beef rose from 56 cents to 58 cents. For pork, it increased to 59 cents from 58 cents a year earlier.

Milk

Prices of fresh milk sold in retail stores have held remarkably stable during 1976 and 1977, varying less than 3 percent during either year. Half-gallon prices averaged 83.9 cents at retail in 1977, only 1.1 cents above 1976. In fact, 1977 retail milk prices were just 5.5 cents above 1974, only a 7-percent increase in 3 years.

All of the increase in retail price of milk from 1976 to 1977 was accounted for by the farm-retail price spread, which increased by 1.5 cents per half gallon, the first increase since 1974. Even though input prices have continued to rise following the large increase in 1974, the price spread declined slightly in both 1975 and 1976. At 38.1 cents per half-gallon, the 1977 spread was just 0.5 cent above that in 1974. For 1977, the farm value per half-gallon averaged 45.8 cents, 0.4 cent lower than in 1976.

Milk production in 1977 continued to run ahead of a year earlier, and totaled about 3 percent more for the year. Despite stable retail prices, fluid sales held about the same for the year, forcing the increased supply into manufacturing. The market was further dampened by the fact that stocks of manufactured dairy products had been rebuilt. With production exceeding commercial demand, the Commodity Credit Corporation found it necessary to purchase sizeable quantities of butter, nonfat dry milk, and cheese. Even so, with the heavy supply situation, the price to farmers for manufacturing grade milk did not average the new $9.00 per hundredweight support level until December.

Table 9--Retail prices, farm values, and price spreads for beef and pork

Item	Retail price per pound 1/	Carcass value 2/	Net farm value 3/	Farm-retail spread: Total	Carcass-retail 4/	Farm-carcass 5/	Farmers' share
			Cents per retail pound				
Beef, Choice							
1972	113.8	80.1	72.4	41.4	33.7	7.7	64
1973	135.5	98.1	89.9	45.6	37.4	8.2	66
1974	138.8	97.4	86.1	52.7	41.4	11.3	62
1975	146.0	105.5	92.9	53.1	40.5	12.6	64
1976	138.9	88.6	77.9	61.0	50.3	10.7	56
1977	138.3	91.0	79.9	58.4	47.3	11.1	58
1976:							
I	142.1	89.8	77.7	64.4	52.3	12.1	55
II	141.5	93.0	83.1	58.4	48.5	9.9	59
III	136.1	83.8	73.1	63.0	52.3	10.7	54
IV	136.0	88.0	77.8	58.2	48.0	10.2	57
1977:							
I	135.1	85.3	74.3	60.8	49.8	11.0	55
II	136.6	90.8	80.4	56.2	45.8	10.4	59
III	138.8	11.4	80.2	58.6	47.4	11.2	58
IV	142.7	96.4	84.6	58.1	46.0	11.8	59
Pork							
1972	83.2	66.3	47.7	35.5	17.9	17.6	57
1973	109.8	87.3	71.5	38.3	22.5	15.8	65
1974	108.2	77.4	60.8	47.4	30.8	16.6	56
1975	135.0	103.8	86.9	48.1	31.2	16.9	64
1976	134.3	93.6	78.4	55.9	40.7	15.2	58
1977	125.4	87.6	73.4	52.0	37.8	14.2	59
1976:							
I	141.5	100.3	86.4	55.1	41.2	13.9	61
II	138.5	100.6	88.7	49.8	37.9	11.9	64
III	137.4	93.1	78.4	59.0	44.3	14.7	57
IV	119.8	80.2	60.5	59.3	39.6	19.7	50
1977:							
I	120.6	84.1	68.9	51.7	36.5	15.2	57
II	121.8	85.7	72.1	49.7	36.1	13.6	59
III	131.1	89.3	78.4	52.7	41.8	10.9	60
IV	128.3	91.3	74.0	54.3	37.0	17.3	58

1/ Composite monthly average prices for all cuts adjusted for volume sold at special prices derived from BLS and food chain prices. 2/ For a quantity equivalent to 1 pound retail cuts: beef, 1.41 pounds of carcass beef; pork, 1.07 pounds of wholesale cuts. 3/ Payment to farmers for quantity of live animal equivalent to 1 retail pound: Beef, 2.28 pounds and pork, 1.97 pounds minus byproduct allowance. 4/ Includes not only gross margin for retailing but also charges made for other marketing services such as fabricating, wholesaling, and in-city transportation. 5/ Measures charges made for livestock marketing, processing, and transporting to city where consumed.

Butter

As a result of higher farm prices for milk used for butter and higher marketing charges, the average retail price of butter increased to $1.33 per pound in 1977, 7 cents over 1976. This is considerably less than the 1976 price jump of 23.5 cents over 1975. Retail prices were relatively steady during January to March as wholesale prices remained at or near the government support buying price for butter. Most of the retail price increase occurred after April 1, mostly in response to a 9.9-cent per pound increase in the government's support buying price which remained in effect the rest of the year. The price jumped 7.5 cents from March to June and an additional 3.2 cents thereafter to $1.38 per pound in December.

Wholesale butter prices have been at or close to the government's support buying price for butter since October 1976. Generally, the supply of milk has been more than adequate to meet demand at the support buying price and the government has been active in buying butter, cheese, and nonfat dry milk to support the price of milk.

The farm-retail spread for butter increased only slightly in 1977, less than 1 cent over 1976. This compares to an increase of 9.5 cents in 1976. The spread declined from January through April, continuing the decline from a high in September 1976. Then the spread rose above the January level in May. The big drop in the spread occurred in April as a result of a sharp increase in farm value. This was followed in May by a corresponding increase in the spread as the retail price increased sharply, adjusting to the higher support price.

A 1975 study of farm-retail spreads for butter showed price spread variations among nine cities from 22.9 to 37.6 cents for store-brand butter and from 30.3 to 60.4 cents for wholesaler brands. Most of the differences were caused by retail prices which differed among cities by as much as 14.9 cents per pound for store-brand butter and 30.3 cents for wholesaler brands. The farm-value of the butter differed by only 2.1 cents.

Of the 170 stores surveyed in seven of the markets, almost 86 percent had private or store-brand butter. Most stores with store brands also handled one to three wholesaler brands; only 18 had store-brand only. Selling prices of the 182 wholesaler brands were the same or above store-brand price by 0-9 cents in 68 percent of the stores; 10-19 cents above in 21 percent; and 20-39 cents higher in 11 percent of the stores.

The quantity of milk used in manufactured dairy products increased rather sharply in 1977. Most of the estimated 2.4-percent increase in milk production was diverted to manufactured products as fluid consumption remained about the same. Milk used in butter increased 13 percent compared to less than 1 percent for cheese.

Butter production in 1977 was estimated to be 1.09 billion pounds, 12 percent more than in 1976. During the first 11 months, butter production ranged from 5 to 20 percent above the corresponding months in 1976 but in December production fell to about 3.5 percent below that of December 1976.

Per capita butter consumption in 1977 held at about 4.4 pounds. However, total consumption of table fats dropped to 16.1 pounds, 0.4 pound under 1976. This decrease in table fats consumption is attributed to an estimated 0.5 pound drop in per capita margarine consumption.

Poultry and Eggs

Broiler producers lost money during much of the first half of 1977 because of escalating feed prices. However, producers showed a profit in the second half mainly because of lower feed prices.

Egg producers made money in the first quarter of the year but sharply lower egg prices and higher feed prices created losses in the second quarter. Feed prices dropped in the second half of the year but sharply lower egg prices resulted in producers showing only a small profit.

Turkey producers showed a good profit in 1977 due largely to excellent profits in the last quarter. Reduced turkey production and relatively strong competing meat prices caused turkey prices to average well above a year earlier.

Although profit margins for eggs and broilers were narrow in 1977, producers will likely increase production in 1978 because of favorable feeding costs. However, the higher egg production will likely result in a decline in egg prices below the cost of production during part if not most of 1978. Larger broiler and competing meat supplies will hold 1978 broiler prices below a year earlier. Excellent profits in late 1977 are expected to lead to a moderate expansion in turkey production in 1978. However, lower feed prices may allow turkey producers to make money until late in 1978.

Eggs: Grade A large eggs sold at retail in 12 major U.S. cities averaged 80 cents per dozen during 1977, 3 cents per dozen less than during 1976 but 4 cents a dozen more than during 1975. The farm price for eggs averaged 51 cents per dozen, also 3 cents less than 1976 but 2 cents more than 1975.

The farm to consumer spread in 1977 stayed the same as during 1976 at 29 cents per dozen. The farm to retailer component of the spread averaged 17 cents per dozen and the retail spread averaged 12 cents per dozen, the same in both cases as during 1976. The farmer's share of the consumer's dollar spent for eggs averaged 64 percent during 1977, down 2 percentage points from 1976.

Frying Chickens: U.S. Grade A frying chickens sold at retail in 12 major U.S. cities averaged 62 cents per pound during 1977 compared to 61 cents for 1976. The farm equivalent value of frying chicken averaged 31 cents per pound during 1977, the same as 1976. Farm value was low in January, increased slowly until July when it reached a high of 35 cents per pound, and then decreased steadily until it reached 27 cents per pound in December. The farm to consumer margin for frying chickens averaged 31 cents per pound during 1977, up a cent from 1976. The farm to retailer component averaged 14 cents per pound, the same as during 1976. The retail spread increased from 16 to 17 cents per pound.

The farmers' share of the consumers' dollar spent for frying chicken averaged 50 percent during 1977, the lowest in several years, and down from 52 percent for 1976.

8-16 Pound Turkeys: Medium turkeys 8-16 pounds sold at retail in 12 U.S. cities during the last quarter of 1977 for an average of 79 cents per pound, up 5 cents per pound from the same period during 1976. The farm equivalent value for the last quarter of 1977 averaged 49 cents per pound, up 11 cents per pound from 1976. The farm to consumer spread for medium-sized turkeys averaged 30 cents per pound, 6 cents per pound less than during 1976. The farm retail component of the margin averaged 15 cents per pound, down 2 cents per pound from 1976. The retail margin averaged 15 cents per pound, down 4 cents per pound from 1976. The farm share of the consumers' dollar spent for turkeys averaged 63 percent, up from 51 percent in 1976. The 1977 share was the highest in recent years.

Fruits and Vegetables

Retail prices increased for many fresh and processed fruits and vegetables in 1977. Price increases were generally larger than in 1976. Higher retail prices were the result of higher farm values and widening farm-retail spreads. Farm-retail spreads for fresh fruits and vegetables tend to vary directly with farm values: when farm value increases, the farm-retail spread tends to increase. This movement in the same direction results from the fact that retailers tend to take a constant percentage markup on fresh produce rather than a constant absolute markup. Since the retail margin constitutes more than half of the total farm-retail spread of fresh fruits and vegetables, use of percentage markups on buying prices considerably affects the behavior of the total spread when farm value changes.

Retail prices of fresh fruits increased about 18 percent overall in 1977. Farm value increased about 21 percent, largely the result of substantially higher grower prices for oranges and apples. Marketing spreads widened about 16 percent. The farmers' share of the retail price of fresh fruit increased slightly.

Led by sharply higher prices for tomatoes, onions, carrots, and cabbage, retail prices of fresh vegetables averaged about 12 percent higher in 1977 than a year earlier. Both the farm value and farm-retail marketing spread of fresh vegetables also increased by about 12 percent in 1977 from 1976. Thus, the farmers' share of 33 percent of the retail price did not change.

Retail prices of processed fruits and vegetables averaged about 4 percent higher in 1977 than a year earlier, reflecting higher marketing charges. The farm value of fruits and vegetables for processing averaged 7 percent lower than in 1976. The marketing spread widened 11 percent which probably reflects, in part, rising costs for metal cans and other containers. The farmer's share of the retail price of processed fruits and vegetables averaged 18 percent in 1977, compared with 20 percent in 1976.

A special marketing study of canned and frozen sweet peas sold in selected cities found that retail prices, wholesale and retail margins, and costs all trended upward during the 1965/66-1975/76 marketing seasons (2).

The retail value of frozen sweet peas in Seattle and Washington, D.C. increased an average of 35 cents per case (24/10-ounce packages) per season. The processor margin increased an average of 14 cents per case per season, the wholesale and retail margin rose 13 cents, and the farm value went up 8 cents.

Similarly, the retail value of canned sweet peas in Chicago and Detroit increased an average of 27 cents per case (24/303's) per season over the 11 seasons. Farm value increased 7 cents per case per season and the processor margin rose 20 cents. The wholesale and retail margin changed very little.

Farm value of both canned and frozen sweet peas averaged 17 percent of retail price for the 11-year period. The wholesale and retail margin for frozen peas averaged 44 percent of the retail value and the processor margin 39 percent. For canned peas, the wholesale and retail margin averaged 8 percentage points less than for frozen peas, partly because there is no refrigeration cost. The processor margin averaged 47 percent of retail price.

Bread

The average retail price of white pan bread in 1977 was 35.5 cents per pound, a slight increase over the 1976 price of 35.3 cents. Monthly retail prices in 1977 exhibited only minor month-to-month change, continuing the moderate retail price activity for white pan bread begun in August 1975.

Farm value of all ingredients in a loaf of bread totaled 4.5 cents in 1977, down 1 cent from 1976. This 18-percent decline in 1977 followed a 19-percent decrease in the farm value of ingredients in 1976. Lower wheat prices accounted for all of the decline in farm value last year. The farm value of wheat, based on market prices, amounted to 2.7 cents per loaf. The values of other farm ingredients used in bread were estimated at 1.8 cents in 1977, unchanged from 1976.

Farm value of wheat in a 1 pound loaf of bread peaked at 5.45 cents in 1974. It has decreased each year since then and in 1977 was 50 percent lower than in 1974. In contrast, retail bread prices for the same period rose about 1 cent per loaf. The farm-retail price spread has persistently expanded, rising from 29 cents per loaf in 1974 to 31 cents in 1977. As a consequence, the percentage of the retail price of a loaf of bread represented by marketing functions rose from 84 percent in 1974 to 87 percent in 1977.

Estimated baker processing costs and wholesaling costs of bread, which are more than two-thirds of the retail price, increased 7 and 8 percent, respectively, in 1977. At the same time, the retail spread decreased 9 percent to 3.1 cents. Since 1974, baker processing and wholesaling costs have risen 37 and 42 percent, respectively, while the estimated retailing spread has declined 47 percent. Last year, the question was first raised as to why wholesale bread prices are increasing at a much greater rate than retail

prices. It was suggested that this relationship may be caused by inadequate data, a shift in consumer purchasing practices, or changes in pricing practices and policies. Accordingly, the baker processing and wholesaling costs, perhaps, should be grouped with the retail spread. This combined spread increased 5 percent in 1977.

In summary, 1977 was the second consecutive year to show relative stability in retail prices of white pan bread. However, the farm value of wheat again declined drastically; it now represents only 8 percent of the retail price of a loaf of bread. In contrast, baker processing and wholesaling spreads increased, continuing an upward trend.

Vegetable Oil Products

Margarine, cooking and salad oil, and shortening are the principal food products made from the oils obtained from soybeans, cottonseed, and corn. Soybean oil is the leading oil or fat used in the manufacture of these products. In 1977, soybean oil accounted for about 75 percent of the fats and oils used in making margarine and cooking and salad oil, and about 60 percent for shortening. These proportions changed only slightly from the previous year even though 6 percent less soybean oil was used in these oil products in 1977.

Retail prices of fats and oils products averaged significantly higher in 1977 than in 1976 as a result of higher farm values for oilseeds. For instance, the retail price of margarine averaged 57 cents per pound last year, about 5 cents higher than for 1976. Correspondingly, the farm value of the oil and a small amount of dry milk solids used to make margarine increased to 20 cents, almost 4 cents higher than a year earlier. The farm-retail price spread increased slightly, averaging 37 cents per pound in 1977.

Farm values of retail products rose in 1977 largely as a result of a spurt in oil prices in late spring and early summer. Soybean oil prices rose from 21 cents per pound in January to about 31 cents a pound in May. The higher soybean oil prices reflected short oil supplies. Oil prices declined after mid-year, reflecting prospects for a large 1977 soybean crop. Most of the relatively high oil prices in the first part of 1977 were passed on to consumers. Retail prices of margarine rose from about 53 cents a pound in January to a high of 61 cents in September.

Farm to retail marketing spreads for vegetable oil products were relatively stable last year. Because farm product values increased, the farmer's share of the retail cost of fats and oils products rose about 6 percentage points to 38 percent, the highest since 1974.

COMPONENTS OF FARM-RETAIL PRICE SPREADS

Farm-retail price spreads represent the charges for all functions required in processing and marketing products after they leave the farm until they are purchased by consumers. Therefore, to better understand why farm-retail

spreads have been widening and where the food dollar has been going, margins or costs of various marketing functions were estimated for leading farm food items, including beef, eggs, milk, and bread (table 10 and fig. 7). These items were studied because of their importance in the food budget and because they represent foods that have widely different marketing channels and costs.

The spread between farm value and retail price is subdivided into five general functions: (1) assembly and procurement, consisting largely of collecting products off farms; (2) processing or packing products for market; (3) intercity transportation of products from the processor or intermediate handler to retail markets; (4) wholesaling or warehousing; and (5) retailing. These components conform as nearly as possible to the functions occurring between the farm and the foodstore. But, they do not conform to the firms performing the functions. For example, although many retailers perform wholesaling functions, there was an attempt to allocate firm cost data to the appropriate function.

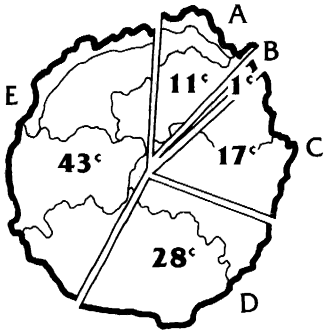
For most food commodities, the marketing process begins with the gathering or assembling of products from farmers at some local collection point, such as a grain elevator, livestock auction, packing shed, or processing plant. The assembly function which usually consists of buying, transporting, and storing the products costs the least of the principal marketing functions. Assembly costs usually average 2 to 3 percent of the retail price.

After they leave the farm, most products are processed or prepared in some way for shipment or sale at retail. The more a commodity is changed from the time it leaves the farm until it reaches the consumer, the larger processing costs are as a proportion of the retail price. For instance, processing costs make up about 50 percent of the retail store price of catsup and canned tomatoes and 33 percent of the retail price of frozen orange juice. Similarly, charges for bread processing which involves milling wheat and making, baking, slicing, and wrapping the bread represent nearly 33 percent of the retail price per loaf. In contrast, processing costs less than 15 percent of the retail price of beef and pork, broilers and eggs, and fluid milk, all items which are changed relatively little after they leave the farm. Similarly, costs for grading and packing fresh fruits and vegetables range between 10 and 15 percent of the retail price.

Transportation costs are relatively high for fresh fruits and vegetables because of their perishability and the long distances they must be shipped to market. Shipping costs for fall potatoes were about 15 percent of the retail price in 1977 and they were about 20 percent for lettuce. In contrast, shipping costs for meats, broilers, eggs, and butter, items relatively high in value, accounted for only 2 percent of the retail price.

Charges for wholesaling, involving warehousing and local delivery to stores, range between 5 and 8 percent of the retail selling price for most food products. However, such costs for bread, normally delivered direct to stores from bakeries by driver salespeople instead of moving through retailers' warehouses, made up over 33 percent of the retail price in 1977. Wholesaling costs for milk were relatively high too because of high labor costs connected with the route drivers' method of delivery.

WHAT THE FOOD DOLLAR PAYS FOR



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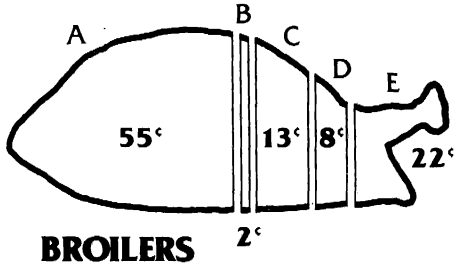

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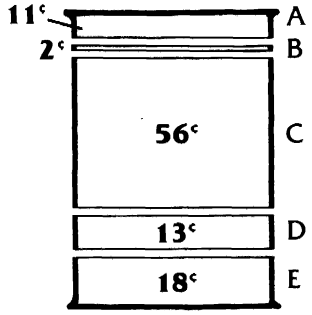
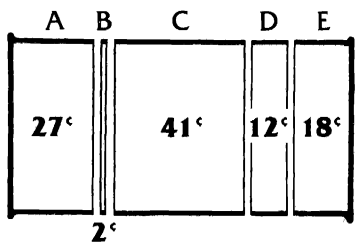


CANNED TOMATOES



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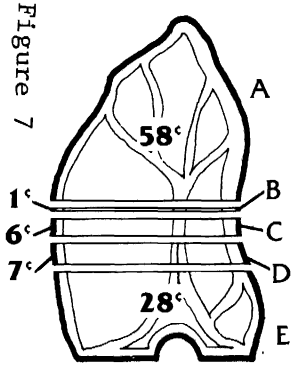

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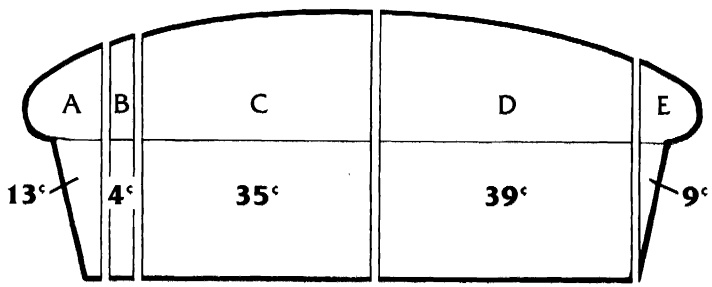

BREAD

A - FARM VALUE

B - ASSEMBLY

C - PROCESSING

D - WHOLESALING, TRANSPORTATION

E - RETAILING

BASED ON PRELIMINARY 1977 DATA.

Figure 7

Table 10--Distribution of retail price according to farm value and marketing function, 16 farm food products, 1976 and 1977

Food item and retail unit	Farm value 1/	Assembly and procurement	Processing	Intercity transportation	Wholesaling	Retailing 2/	Retail price
				Cents			
Beef, Choice (pound)							
1976	77.9	1.7	7.7	1.3	9.1	41.2	138.9
1977	79.9	1.7	8.1	1.3	8.5	38.8	138.3
Pork (pound)							
1976	78.4	1.9	11.9	1.4	8.6	32.1	134.3
1977	73.4	1.9	11.0	1.4	8.0	29.7	125.4
Broilers (pound)							
1976	32.6	1.1	7.8	1.3	3.7	13.2	59.7
1977	33.0	1.1	8.0	1.4	3.7	12.9	60.1
Eggs, grade A or AA large (dozen)							
1976	58.0	0.9	9.6	1.4	3.5	11.5	84.9
1977	53.8	0.9	10.3	1.5	3.5	12.3	82.3
Milk, sold in stores (1/2 gallon)							
1976	46.2	2.8	3/10.6	4/	12.1	11.0	82.8
1977	45.8	2.9	3/11.1	---	--	--	83.9
Butter (pound)							
1976	85.2	3.2	9.5	2.3	6.5	19.3	126.0
1977	91.5	3.2	9.5	2.4	--	--	133.1
Bread, white (pound)							
1976	5.5	5/1.5	11.7	6/ .5	12.7	3.4	35.3
1977	4.5	5/1.4	12.5	6/ .4	13.6	3.1	35.5
Potatoes (fall) (10-lb bag)							
1976	51.5	7/	20.0	22.7	13.4	59.7	167.3
1977	44.3	7/	16.9	24.1	13.2	66.6	165.1
Oranges, Calif. (dozen)							
1976	30.7	2.1	16.3	13.7	10.2	54.5	127.5
1977	36.2	2.3	20.6	14.5	11.2	55.5	140.3
Lettuce, Calif. (head)							
1976	10.7	.4	7.1	8.9	4.1	19.8	51.0
1977	5.1	.4	7.3	9.4	3.7	20.1	46.0

Continued

See footnotes at end of table.

Table 10--Distribution of retail price according to farm value and marketing function, 16 farm food products, 1976 and 1977, continued

Food item and retail unit	Farm value 1/	Assembly and procurement	Processing	Intercity transportation	Wholesaling	Retailing 2/	Retail price
Orange juice, frozen (6-ounce can)							
1976	10.4	.5	5.9	1.6	3.6	6.7	28.7
1977	9.0	.6	13.8	1.7	3.0	5.9	34.0
Tomatoes, Calif., whole (303 can)							
1976	4.0	.7	17.8	3.2	2.1	7.3	35.1
1977	3.9	.6	21.1	3.4	1.5	6.8	37.3
Tomato catsup, Calif, (14-oz.bot.)							
1976	5.8	1.0	25.5	4.0	2.5	9.0	47.8
1977	5.7	.9	23.7	4.2	3.5	10.8	48.8
Margarine (pound)							
1976	16.6	.9	8/22.0	1.2	2.6	9.2	52.5
1977	20.5	1.4	8/21.3	1.4	2.9	9.7	57.2
Salad and cooking oil (24-oz. bot.)							
1976	26.8	1.7	8/44.2	5.3	4.8	12.6	95.4
1977	39.3	2.5	8/40.0	5.9	5.4	13.9	107.0
Vegetable shortening (3 pounds)							
1976	56.9	3.5	8/69.3	5.6	4.6	13.7	153.6
1977	71.0	5.2	8/59.9	6.2	4.9	14.5	161.7

1/ The farm value is the gross return to farmers for the quantity of farm products equivalent to the unit sold at retail minus imputed value of byproducts. Because of losses from processing, waste, and spoilage, the farm value represents larger quantities than the retail unit. 2/ Instore costs only. Headquarters and warehousing expenses are included in wholesaling. 3/ Processing cost less credit of 0.7 cent for butterfat differential between 3.5 percent milk purchased by plants and 3.35 percent milk sold at retail. 4/ Included in wholesaling. 5/ Assembly of wheat and milling. 6/ Flour only. 7/ Included in farm value. 8/ Includes oilseed crushing, crude oil refining, and manufacturing of finished product.
Note: Dashes mean not estimated. 1977 data are preliminary.

Retailing costs vary widely among foods reflecting the amount of handling required of products in stores, shelf space occupied, special equipment needs such as refrigeration, and rate of sales. Among the products studied, the instore retailing margin ranged from about 10 to 40 percent of the retail selling price. But such margins made up less than 25 percent of the retail price for all the items studied except fresh oranges, potatoes, and lettuce which are higher than most other products. The larger margin for these products is due to the relatively large amount of store space which they occupy.

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